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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,084	02/20/2004	Nicholas A. Sanders	HYP-046C2	1162

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EXAMINER

VAN, QUANG T

ART UNIT	PAPER NUMBER
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3742

DATE MAILED: 04/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary	Application No. 10/784,084	Applicant(s) SANDERS ET AL.	
	Examiner Quang T Van	Art Unit 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 64-82 is/are pending in the application.
- 4a) Of the above claim(s) 82 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 64, 66, 67, 71 and 74-77 is/are rejected.
- 7) ☒ Claim(s) 65, 68-70, 72, 73 and 78-81 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/20/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. Applicant's election without traverse of Species I (Figures 1-2, claims 64-81) in the reply filed on 03/07/2005 is acknowledged. Non-elected claim 82 is withdrawn from consideration.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 64, 66-67, 71, and 74-77 are rejected under 35 U.S.C. 102(b) as being anticipated by Fein (US 3,567,898) cited by applicants. Fein discloses a plasma cutting torch having a dispenser (16), comprising an electrically conductive crucible (18), for dispensing a jet stream (44) of an electrically conductive fluid; and a power source (4) including at least a first electrical connection (10) to the fluid within the dispenser and a second electrical connection (12) to the jet stream external to the dispenser. With regard to claim 75, "said electrical connection comprises a feedstock of the conductive fluid". By definition "Feedstock" is the raw material furnished to a machine or process" (<http://www.accessscience.com/server-java/Arknoid/science/AS>). Fein discloses a plasma gas (20) being a raw material, which is considered a feedstock.

4. Claims 64, 66-67, 71, and 74-77 are rejected under 35 U.S.C. 102(b) as being anticipated by Browning (US 4,764,656) Browning discloses a transfer-arc plasma apparatus having a dispenser (2), comprising an electrically conductive crucible (10'),

for dispensing a jet stream (61) of an electrically conductive fluid; and a power source including at least a first electrical connection (-) to the fluid within the dispenser (2) and a second electrical connection (+) to the jet stream external to the dispenser. With regard to claim 75, "said electrical connection comprises a feedstock of the conductive fluid". By definition "Feedstock" is the raw material furnished to a machine or process" (<http://www.accessscience.com/server-java/Arknoid/science/AS>). Browning discloses a primary gas (col. 4, lines 32-35), secondary gas (col. 4, lines 40-42)) being a raw material, which is considered a feedstock.

5. Claims 65, 68-70, 72-73, and 78-81 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Couch, Jr. et al (US 5,170,033) discloses a process and apparatus for reducing wear of an electrode in a plasma arc torch. Reed et al (US 2,874,265) discloses a process and apparatus of non-transferred arc torch. Sanders et al (US 6,720,518) discloses a process and apparatus for cutting or welding a workpiece.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang T Van whose telephone number is 571-272-4789. The examiner can normally be reached on 8:00Am 7:00Pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 571-272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



QV
April 6, 2005



Quang T Van
Primary Examiner
Art Unit 3742